A New Species of *Python* from Arnhem Land

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ABSTRACT

A new species of *Python* (Family Boidae) is described from two male specimens from the Arnhem Land escarpment of northern Australia. The new species is considered to belong to the *reticulatus* group of the genus *Python* and may be distinguished from all other species by its high ventral and subcaudal scale counts. An account is given of meristic variation of the dorsal scale rows of the new species and comparison made with other species.

INTRODUCTION

About ten species of pythons belonging to four genera are known from Australia (Cogger, 1975). The most recent critical work concerning the Pythoninae is that of McDowell (1975) whose generic definitions are followed here. McDowell has divided the genus *Python* into the *molurus* and *reticulatus* groups; the latter possessing infralabial pits set in a deep groove, slit-like supralabial pits set diagonally, hemipenis with proximally directed chevron-like flounces, and the upper lip below the eye light-coloured and similar in colour to the rest of the upper lip. The *reticulatus* group includes *Python amethistinus, P. boeleni, P. spilotus, P. reticulatus* and, possibly, *P. timorensis*. Two specimens of a boid snake from Arnhem Land in northern Australia appear to belong to this group also and are described herein as a new species. The specific name is derived from Oenpelli, the settlement nearest to the type locality.

***Python oenpelliensis* n. sp.**

Holotype: ♂; 6.5 km S.W. of Oenpelli, Northern Territory, Australia (12° 21' S., 133°01'E.), hereby designated type locality. Coll. Mr. B. Jukes, 17.VI.1975. Specimen in Museums and Art Galleries of the Northern Territory, Darwin (Reg. No. R0840). *Measurements* (in mm): Total length 3560; snout to vent 3037; tail 523; head length 69; snout to eye 25.4; interorbital distance 21.7; snout to nostril 4.7; orbit to nostril 17.3; internasal distance 11.3.

Paratype: ♂; Little Nourlangie Rock, N.T., Australia, (12°51'S., 132°48'E.). Coll. Dr. R. Begg, 9.VI.1976. Specimen in Australian Museum, Sydney (Reg. No. R55009). *Measurements* (mm): Total length 3593; snout to vent 3043; tail 550; head length 71.5; snout to eye 25; interorbital distance 22.2; snout to nostril 4.6; orbit to nostril 18.6; internasal distance 10.7.

DESCRIPTION OF HOLOTYPE

A large boid snake with a strongly prehensile tail. Scales without apical pits and without granular gular scales bordering the mental groove.

Rostral visible from above, slightly broader than long, with a pair of deep slit-like sensory pits. Supralabials 15, the seventh and eighth on the left side and the seventh, eighth and ninth on the right entering the eye. First three supralabials with deep sensory pits; pit of first supralabial a long diagonal slit broadening dorsally and contacting ventral edge of the nasal. The slit of the second supralabial almost contacts ventral edge of nasal; third supralabial slit is distinct but shorter and broader than first two. Fourth supralabial without a distinct slit but an obscure elongate mark is present. Infralabials 24, six of the more posterior infralabials with deep rectangular pits. The row of infralabial pits begins beneath the eye and is sunk in a longitudinal groove. The row is preceded by an infralabial with a shallower pit.

One pair of prefrontals is present, each almost twice as long as broad. Internasals preceded by a pair of small scutes. The posterior prefrontal area, extending to the anterior frontals and supraoculars, consists of 22 subequal scales.

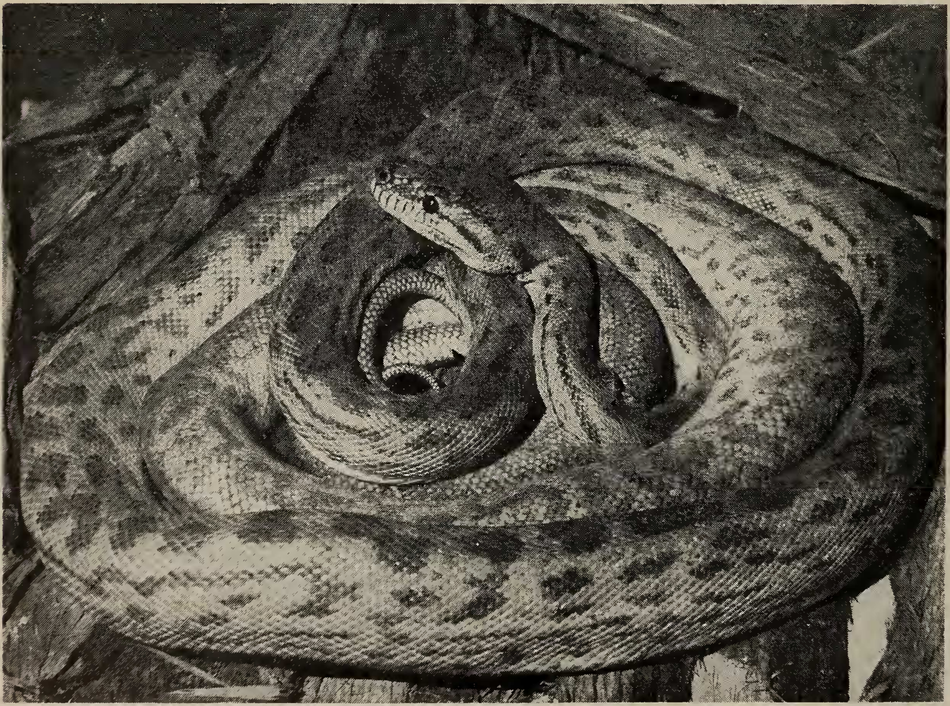
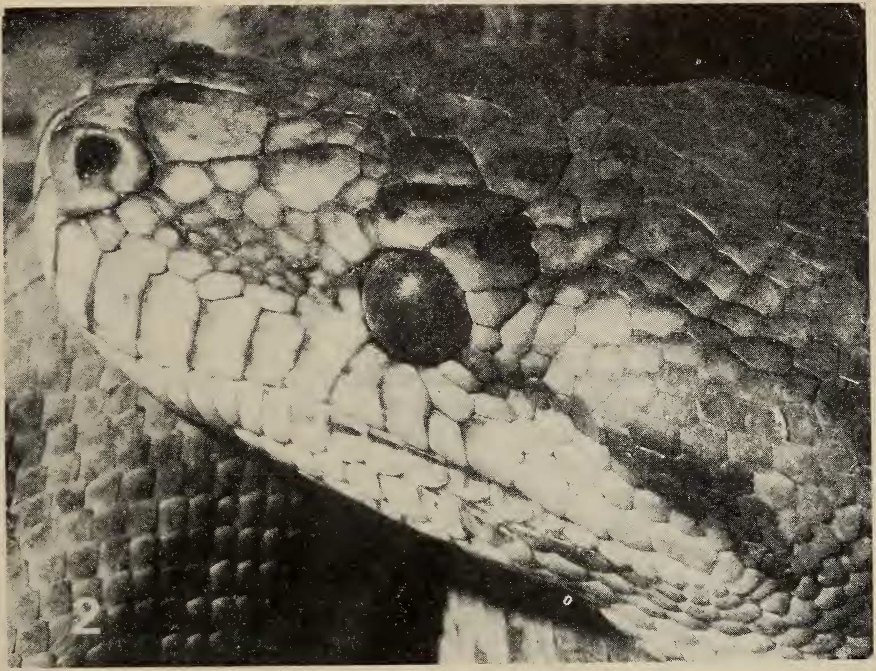
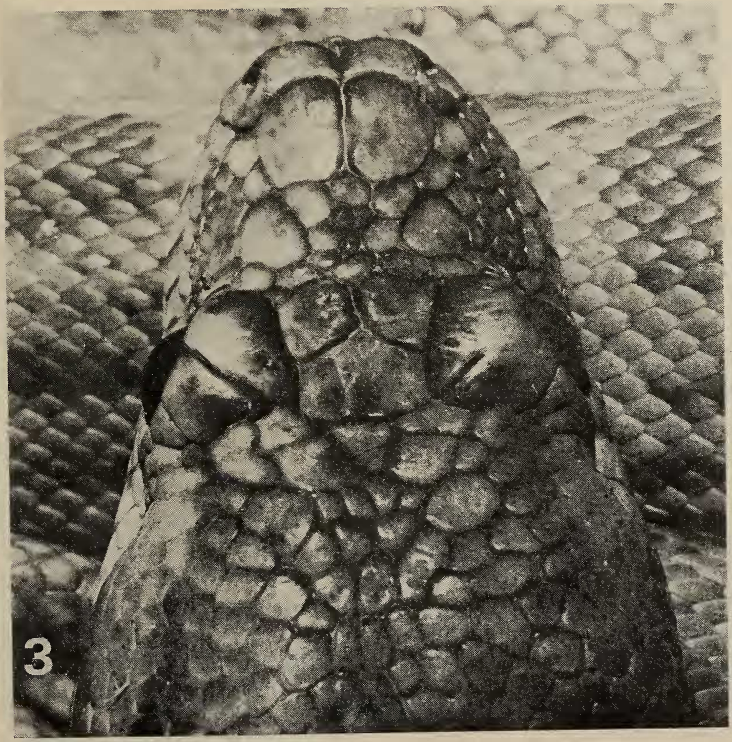


Fig. 1. *Python oenpelliensis* n. sp., holotype, in life.





Figs. 2 & 3. *Python oenpelliensis* n. sp., holotype,

2, dorso-lateral view of head.

3, dorsal aspect of head.

Frontal plate divided into three; an equal anterior pair followed by a single plate. Parietal scutes absent, the top of the head covered with numerous subequal scales. Nasal partially divided; nostril directed upwards and outward; fissure extending from nostril to anterior loreal scutes. Loreal scutes, including small granules, 30 on right and 26 on left side. Preoculars 4 right, 3 left; postoculars 6 right, 5 left. Supraocular entire on right side (with partial division), divided on left with anterior portion the largest.

Mental groove relatively long, bordered anteriorly by first infralabials; two scales lie in rear of groove. Lateral border of groove of 9 and 10 scales similar in size to other gulars.

Dorsal scales smooth without apical pits; the first row large but less than half as broad as ventrals. At one head length behind head scales in 53 rows; at midbody, 70 rows; one head length anterior to the cloaca, 35 rows. About 50% of dorsal scale rows doubled (see discussion).

Ventrals 429. Subcaudals 155, mostly divided (7, 18, 19, 34, 35, 36, 37, 118, 119 are entire). Anal single. Cloacal spurs present.

One pair of premaxillary teeth. Maxillary teeth; 11 on right maxilla (estimated 6 missing), 14 on left (est. —3); estimated maxillary total 17. Palatine teeth; 10 on right (est. —5), 15 on left (intact series). Dentary teeth; 15 on right (est. —3), 14 on left (est. —4); estimated dentary total 18.

Hemipenis forked extending for about 10 subcaudals forked about 3 subcaudals proximal to this. Chevron like flounces of organ, 7.

DESCRIPTION OF PARATYPE

As for holotype with the following exceptions (figures in brackets refer to holotype).

Supralabials 17 (15); 8, 9 meet eye (7, 8) on left; 8, 9, 10 meet eye (7, 8, 9) on right. Infralabials 24 right, 22 left (24); seven on left pitted. Posterior prefrontal area 25 (22). Loreals 45 (30) right, 43 (26) left. Postoculars 5 (6) right, 7 (5) left. Supraoculars right divided, left entire (opposite arrangement in holotype). Ventrals 445 (429). Subcaudals 163 (155), mostly divided; 15 single subcaudals (9).

COLOUR NOTES

Pale fawn above merging into a lighter putty grey on the lower sides. A series of dark grey-brown blotches on the dorsal surface is irregularly arranged in four to five longitudinal rows. These dark blotches and streaks are largest in the vertebral series and much smaller laterally. Many of the dorsal scales carry an indistinct dark brown or black spot at the apex. The dorsal pattern becomes more obscure posteriorly. The dorsal scales of the tail are dark-edged producing a reticulated effect. The top of the head is pale fawn intermixed to a lesser degree with dark brown. Several of the head shields have the centre or the edge coloured dark brown. A dark brown supraocular streak about two scales wide extends from the supraoculars down each side of the head to the nape. A similar streak, indistinct anteriorly, runs from the nostril through the eye and is bordered above and below by equal areas of pale fawn. The ocular and supraocular streaks are joined by a diffuse band of dark spots in the post-temporal region. The supralabials and infralabials are fawn, the latter partially edged with dark brown below. The sublingual and gular area is white and the ventral surface of the body off white to pale yellow.

Holotype and paratype do not differ markedly in colour.

LOCALITY AND COLLECTING NOTES

Both specimens of *P. oenpelliensis* were collected near sandstone rock outcrops; the holotype specimen was collected crossing a road bordered by sandstone. More data is available for the locality from which the paratype was collected. The area is Myrtle-Pandanus savannah and mixed scrub. The specimen was collected a short distance from a sandstone outcrop (Dr. R. Fox, pers. comm.).

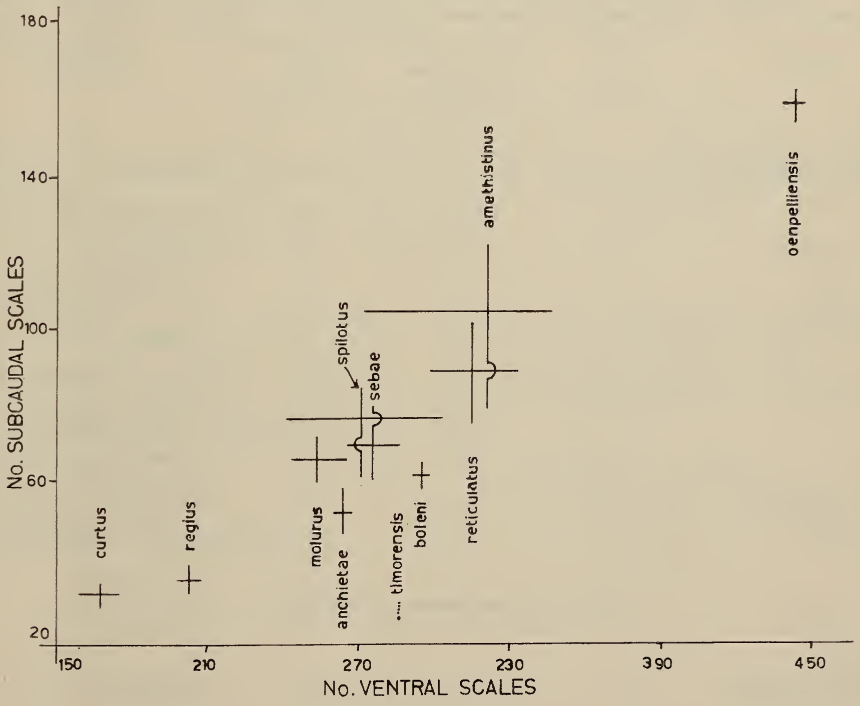


Fig. 4. Ranges of ventral and subcaudal scale counts for eleven species of the genus *Python*. Data from Boulenger (1893 & 1912), Cogger (1975). Fitzsimons (1962), Gow (1976), McDowell (1975) and Taylor (1965).

It was noted by both collectors and subsequent handlers that both specimens were docile during and after capture. Anecdotal evidence suggests that individuals of this new species may be longer than the specimens recorded herein.

DISCUSSION

Python oenpelliensis n. sp. adds a further species to the diversity of Pythoninae known from the Australasian region (see McDowell, 1975 p.3). The new species may be distinguished from other species of the genus *Python* by the high ventral and subcaudal scale counts, no other species possessing more than 346 ventrals or 122 subcaudals (maximum counts recorded for *Python amethistinus;* MacDowell *loc. cit.*). The distribution of numbers of ventrals and subcaudals for eleven species of *Python* are shown in Fig. 4. These characteristics are also adequate to separate the new species from all other Australian boid snakes.

TABLE 1

DOUBLE DORSAL SCALE ROWS OF 9 SPECIES OF PYTHONS

Species	Number of ventrals	Number of double dorsal scale rows	% ventrals/ double dorsal rows	Locality and comments
Python oenpelliensis	429	221	51.5	Holotype
,, ,,	445	223	50.1	Paratype
P. amethistinus	343	16	4.7	Queensland
P. boeleni	314	57	18.2	Sepik R., P.N.G.
P. spilotus	296	76	25.7	Oenpelli, N.T.
,,	282	98	34.8	Central Australia
,,	291	109	37.5	Central Australia
,,	283	90	31.8	Melville Is., N.T.
Liasis olivaceus	353	107	30.3	Adelaide R., N.T.
L. childreni	261	65	24.9	Central Australia
L. boa	267	56	20.9	New Ireland
L. mackloti *	275	83	30.2	Katherine, N.T.
Aspidites melanocephalus	329	124	37.7	Katherine, N.T.

* *Liasis fuscus* Peters, 1847 is a synonym of *Liasis mackloti* Dumeril and Bibron according to McDowell (1975, 6.34 *et. seq.*).

The dorsal scalation also distinguishes *P. oenpelliensis* from other species of Pythoninae. The number of dorsal scale rows of the new species is not the same as the number of ventral scales. About 50% of the ventral scales correspond to double, not single, rows of dorsal scales. It is believed that this is the first time that this meristic variation has been reported in the Pythoninae. The degree of doubling of dorsal scale rows in relation to the number of ventral scales is shown in Table 1.

It is apparent, from the limited data available, that the doubling of dorsal scale rows is very much greater in *P. oenpelliensis* than in the other species investigated. It is not apparent, by inspection at least, whether any pattern is present in the distribution of double dorsal scale rows either in a specific or an individual sense. Such analysis must await more data but it is suggested that the meristic variation of dorsal doubling in pythons is worth further investigation.

ACKNOWLEDGEMENTS

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